

**What is claimed is:**

1                   1. An apparatus for classifying a call to a destination  
2    endpoint comprising:  
3                   a receiver for receiving information from the  
4    destination endpoint;  
5                   a first detector for determining a first classification in  
6    response to the information received from the destination  
7    endpoint;  
8                   a second detector for determining a second  
9    classification in response to the information received from the  
10   destination endpoint;  
11                  a third detector for determining a third classification in  
12   response to the information received from the destination  
13   endpoint; and  
14                  an inference engine for determining a call  
15   classification of the destination endpoint in response to the first,  
16   second, and third classifications.

1                   2. The apparatus of claim 1 further comprises a fourth  
2    detector for determining a fourth classification in response to  
3    the information received from the destination endpoint; and  
4                   the inference engine further responsive to the fourth  
5    classification for determining the call classification of the  
6    destination endpoint.

1                3. The apparatus of claim 1 wherein the first detector  
2 is a tone detector.

1                4. The apparatus of claim 1 wherein the second  
2 detector is an energy analyzer.

1                5. The apparatus of claim 1 wherein the third detector  
2 is a zero crossing analyzer.

1                6. The apparatus of claim 2 wherein the fourth  
2 detector is an automatic speech recognizer.

1                7. The apparatus of claim 6 further comprises a  
2 recorder for recording the received information and for updating  
3 the inference engine.

1                8. The apparatus of claim 2 wherein the first detector  
2 is a tone detector, the second detector is an energy analyzer,  
3 and third detector is a zero crossing analyzer;

1                9. The apparatus of claim 8 wherein the fourth  
2 detector is an automatic speech recognizer.

1                10. A call classifier for classifying a call to a  
2 destination endpoint comprising:  
3                a circuit for receiving information from the destination  
4 endpoint and for processing the received information;  
5                a tone detector for determining a first classification in

6 response to the processed information;  
7 a energy analyzer detector for determining a second  
8 classification in response to the processed information;  
9 a zero crossing analyzer detector for determining a  
10 third classification in response to the processed information;  
11 and  
12 an inference engine for determining a call  
13 classification of the destination endpoint in response to the first,  
14 second, and third classifications.

1 11. The call classifier of claim 10 further comprises a  
2 recorder for recording the received information and for updating  
3 the inference engine.

1 12. A call classifier for classifying a call to a  
2 destination endpoint comprising:  
3 a circuit for receiving information from the destination  
4 endpoint and for processing the received information;  
5 a tone detector for determining a first classification in  
6 response to the processed information;  
7 a energy analyzer detector for determining a second  
8 classification in response to the processed information;  
9 a zero crossing analyzer detector for determining a  
10 third classification in response to the processed information;  
11 an automatic speech recognition unit for determining a  
12 fourth classification; and

13 an inference engine for determining a call  
14 classification of the destination endpoint in response to the first,  
15 second, third and fourth classifications.

1 13. The call classifier of claim 12 further comprises a  
2 recorder for recording the received information and for updating  
3 the inference engine.

1 14. The call classifier of claim 12 wherein the  
2 automatic speech recognition unit is determining words.

1 15. The call classifier of claim 12 wherein the  
2 automatic speech recognition unit is determining phrases.

1 16. The call classifier of claim 15 wherein the  
2 automatic speech recognition unit is executing a Hidden  
3 Markov Model.

1 17. A method for classifying a call to a destination  
2 endpoint, comprising the steps of:

3 receiving information from the called destination  
4 endpoint;

5 performing a first classification of the received  
6 information;

7 performing a second classification of the received  
8 information;

9 performing a third classification of the received

10 information; and

11 determining a call classification of the called  
12 destination endpoint from the first, second, and third  
13 classifications.

1 18. The method of claim 17 further comprises the  
2 step of performing a fourth classification of the received  
3 information; and  
4 the step of determining further responsive to the fourth  
5 classification to determine the call classification of the called  
6 destination endpoint.

1 19. The method of claim 18 wherein the first  
2 classification is for one of tone, energy, zero crossings, or  
3 speech.

1 20. The method of claim 19 wherein the second  
2 classification is for one of tone, energy, zero crossings, or  
3 speech.

1 21. The method of claim 19 wherein the third  
2 classification is for one of tone, energy, zero crossings, or  
3 speech.

1 22. The method of claim 21 wherein the fourth  
2 classification is for one of tone, energy, zero crossings, or  
3 speech.

1           23. The method of claim 22 wherein the step of  
2 determining comprises the step of executing an inference  
3 engine.

1           24. The method of claim 23 further comprises the  
2 step of recording the received information for updating the  
3 inference engine.

1           25. The method of claim 23 wherein performing  
2 classification for speech comprises the step of executing a  
3 Hidden Markov Model.

1           26. The method of claim 23 wherein performing  
2 classification for speech comprises the step of determining  
3 words.

1           27. The method of claim 23 wherein performing  
2 classification for speech comprises the step of determining  
3 phrases.

1           28. A method for classifying a call to a destination  
2 endpoint, comprising the steps of:  
3           receiving information from the called destination  
4 endpoint;  
5           performing a tone classification of the received  
6 information;  
7           performing a energy classification of the received

8 information;  
9 performing a zero crossing classification of the  
10 received information;  
11 performing speech classification of the received  
12 information; and  
13 executing an inference engine to determine a call  
14 classification of the called destination endpoint from the tone,  
15 energy, zero crossing, and speech classifications.

1 29. The method of claim 28 wherein performing  
2 speech classification comprises the step of determining words.

1 30. The method of claim 28 wherein performing  
2 speech classification comprises the step of determining  
3 phrases.

1 31. The method of claim 28 further comprises the  
2 step of recording the received information for updating the  
3 inference engine.

1 32. Apparatus for implementing the steps of claim 17.

1 33. Apparatus for implementing the steps of claim 18.